

WHAT IS CLAIMED IS:

1. A safety needle assembly comprising a needle hub with proximal and distal ends and a passage extending between said ends, a needle cannula mounted to said passage of said needle hub and having a pointed distal end projecting beyond said distal end of said hub, a shield having proximal and distal ends, said proximal end of said shield being hingedly mounted to said hub for rotation from a first position where said shield is spaced from said needle cannula to a second position where said shield substantially surrounds said needle cannula, said shield comprising a top wall and opposed first and second sidewalls extending from said top wall, said sidewalls having edges remote from said top wall, at least one cannula finger lock having a base end integral with the first sidewall and a free end projecting angularly towards said top wall, portions of said cannula finger lock in proximity to said base end thereof being substantially rigid, and portions of said cannula finger lock in proximity to said free end thereof being resiliently deflectable, whereby resiliently deflectable portions of said cannula finger lock yield as said shield is rotated into said second position to permit said needle cannula to be trapped between said cannula finger lock and said top wall, and whereby substantially rigid portions of said cannula finger lock prevent re-exposure of said needle cannula after said shield is in said second position.
2. The safety needle assembly of claim 1, wherein said portions of said cannula finger lock in proximity to said free end are made more flexible than portions of said cannula finger lock near said base end by forming said cannula finger lock with reduced dimensions at locations in proximity to said free end thereof.
3. The safety needle assembly of claim 2, wherein portions of said cannula finger lock in proximity to said free end thereof are resiliently deflectable in directions transverse to said needle cannula when said shield is rotated into said second position, said portions of said needle cannula in proximity to said free end being of reduced dimension in directions extending substantially along a direction of deformation of said cannula finger lock.

4. The safety needle assembly of claim 2, wherein portions of said cannula finger lock in proximity to said free end thereof are resiliently deflectable in directions transverse to said needle cannula when said shield is rotated into said second position, said portions of said needle cannula in proximity to said free end being of reduced dimension in directions substantially parallel to said needle cannula when said shield is in said second position.

5. The safety needle assembly of claim 1, wherein said at least one cannula finger lock comprises at least first and second cannula finger locks, a web extending between portions of said first and second cannula finger lock substantially adjacent the respective base ends thereof for making said cannula finger lock substantially rigid at locations in proximity to said base ends thereof.

10 6. The safety needle assembly of claim 1, wherein said at least one cannula finger lock comprises a plurality of cannula finger lock, portions of the respective cannula finger locks in proximity to the base ends thereof being connected to one another by webs, portions of said cannula finger locks adjacent the free ends thereof being substantially free of said webs.

15 7. The safety needle assembly of claim 1, wherein said cannula finger lock is formed unitarily with said shield.

20 8. The safety needle assembly of claim 1, wherein said needle cannula has a proximal end projecting proximally beyond said hub.

25 9. The safety needle assembly of claim 1, wherein said hub further includes at least one detent formed thereon, and wherein said shield includes an ear formed thereon and configured for engaging said detent on said hub when said shield is in said second position, said detent and said ear being configured for providing audible and tactile indication of said shield reaching said second position.

10. A safety needle assembly comprising a medical device, a needle cannula mounted to the medical device and having a pointed distal end projecting beyond said medical device, a shield having an elongate slot, said slot being dimensioned for receiving at least said pointed distal end of said needle cannula, said 5 shield being hingedly mounted in proximity to said medical device for rotation from a first position where said needle cannula is exposed to a second position where at least said pointed distal end of said needle cannula is in said slot of said shield, at least one cannula finger lock having a substantially rigid base end projecting from said shield and partly into said slot, said cannula finger lock further having a resiliently deflectable free end, whereby said resiliently deflectable free end of said cannula finger lock yields as said shield is rotated into said second position to permit said needle cannula to be trapped in said shield by said cannula finger lock, and whereby said substantially rigid base end of said cannula finger lock prevents re-exposure of said needle cannula after 10 said shield is in said second position.

15 11. The safety needle assembly of claim 10, wherein said portions of said cannula finger lock in proximity to said free end are made more flexible than portions of said cannula finger lock near said base end by forming said cannula finger lock with reduced dimensions at locations in proximity to said free end thereof.

20 12. The safety needle assembly of claim 11, wherein portions of said cannula finger lock in proximity to said free end thereof are resiliently deflectable in directions transverse to said needle cannula when said shield is rotated into said second position, said portions of said needle cannula in proximity to said free end being of reduced dimension in directions extending substantially along a direction of deformation of said cannula finger lock.

13. The safety needle assembly of claim 11, wherein portions of said cannula finger lock in proximity to said free end thereof are resiliently deflectable in directions transverse to said needle cannula when said shield is rotated into said second position, said portions of said needle cannula in proximity to said free end being of reduced dimension in directions substantially parallel to said needle cannula when said shield is in said second position.

14. The safety needle assembly of claim 10, wherein said at least one cannula finger lock comprises at least first and second cannula finger locks, a web extending between portions of said first and second cannula finger lock substantially adjacent the respective base ends thereof for making said cannula finger lock substantially rigid at locations in proximity to said base ends thereof.

15. The safety needle assembly of claim 10, wherein said at least one cannula finger lock comprises a plurality of cannula finger lock, portions of the respective cannula finger locks in proximity to the base ends thereof being connected to one another by webs, portions of said cannula finger locks adjacent the free ends thereof being substantially free of said webs.

16. The safety needle assembly of claim 10, wherein said cannula finger lock is formed unitarily with said shield.